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PUBLICATIONS OF THE INTERNATIONAL INSTITUTE OF AGRICULTURE

IN THE PRESS:—

AGRICULTURAL EDUCATION IN THE WORLD

Vol. III: NORTH AMERICA

This volume is the third of the series on *Agricultural Education in the World*. It will be recalled that the first two volumes dealt with agricultural education in the countries of Europe. This monograph, consisting of approximately 300 pages, includes the following countries: Canada, United States of America, Mexico, Newfoundland. The text is in both French and English. Each country is treated in a uniform manner:— historical review of agricultural education, general survey of the present organization of instruction, detailed study of the principal institutions, schools, colleges or University divisions giving practical and scientific instruction. This monograph will appear during the first quarter of 1938.

IN THE PRESS:—

LES ALEURITES ET L'INDUSTRIE DE L'HUILE DE BOIS DE CHINE DANS LE MONDE

(IN FRENCH ONLY)

This monograph is the third of a series treating on special subjects of a definite topical interest. The first two volumes of this series covered the cultivation and uses of soybean throughout the world, and leguminous plants utilized as green manure, as cover and as shade.

The monograph is divided into four parts: I. The cultivation of *Aleurites* — II. Present state of this cultivation in the different countries — III. Technological study of Chinese wood oils — IV. Trade in Chinese wood oils.

As may be seen, this monograph is not limited to the study of purely technical questions but also deals with the economic and commercial problems regarding this subject.

Particular attention is drawn to the second part in which the information given is of an original character, being assembled from the data received in response to an enquiry carried out by the Institute among the different producing countries. In the first section, cultivation is treated in general. In the part dealing with the technology of the oils, full details have been given on the special characteristics of each type of wood oil and the trade specifications to which they should correspond. In the fourth part, a concise though comprehensive review is given of commercial activities in wood oils.

The monograph is completed by an exhaustive bibliography which includes the principal studies of recent date on this question.

BOOKS PRESENTED TO THE LIBRARY OF THE INTERNATIONAL INSTITUTE OF AGRICULTURE

Agenda forestier et de l'industrie du bois publié par la Société vaudoise de sylviculture avec la collaboration de l'Association forestière vaudoise. Ed. 1938. 31ème année. Lausanne, V. Porchet & Cie, [1938]. 124 p.

Agricultural Economics Society. Journal of proceedings of the Agricultural Economics Society. Report of conference held at St. John's College, Cambridge 2-5 July 1937. [London], 1937. 102 p.

Almanacco agrario italiano. Piccola enciclopedia agricola diretta da Arturo Marescalchi. v. 1, per l'anno 1938. Firenze, R. Bemporad, [1937]. 587 p.

Almanacco degli agricoltori 1938. Roma, « La Rivista agricola », 1938. 200 p.

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Borasio, L. I succedanei nella panificazione. 2ª edizione riveduta ed ampliata. Vercelli, Tip. Gallardi, 1937. 99 p. (Quaderni della Stazione sperimentale di risicoltura, Vercelli, n. 17).

Botanical Society of Edinburgh. Transactions and proceedings. v. 32. Part 2. Session 1936-37. Edinburgh, Neill & Co., 1937. 380 p.

Bowman, I. Limits of land settlement. A report on present-day possibilities. New York, Council of foreign relations, [1937]. vii, 380 p.

British Empire Trades Index 1937-38. London, Business dictionaries, [1937]. 664 p.

California fruit growers exchange. Annual report of the General Manager 1936-37. [Los Angeles], 1937. 36 p.

Canadian grain trade year book 1935-36. Full Canadian grain statistics, with summary tables for principal foreign countries and world's production and movement. Year ending July 31, 1936. v. 16. Winnipeg, Sanford Evans statistical service, [1936]. 105 p.

Central States forestry congress. September 29, 30 and October 1, 1936. Elkins, West Virginia. Charleston, [Hood Hiserman Brodhag co.], [1937], 59 p.

Coffey, W. C. Productive sheep husbandry. 3rd edition revised by William G. Kammlade. Chicago, J. B. Lippincott, 1937, xxxii, 479 p. (Lippincott's farm manuals).

Cotton year book of the New York cotton exchange 1937. New York, New York cotton exchange, [1937]. 258 p.

The radio communiqués of the International Institute of Agriculture will be transmitted between 2.45 and 2.52 p. m. on the following days: Thursday, English ***and*** German; ***Saturday***, Spanish; ***Tuesday,*** Italian ***and*** French.

They will be broadcast from Rome II (245.5 m.) and Rome 2 RO 4 (25.4 m.).

The hour of broadcasts is in Central European Time, which is one hour ahead of Greenwich Mean Time, and 5 hours ahead of Eastern Standard Time in the United States.

INTERNATIONAL BULLETIN OF PLANT PROTECTION

1938 No. 2

DISCOVERIES AND CURRENT EVENTS *

Angola: Locust Movements (*Nomadacris septemfasciata* and *Locusta migratoria migratorioides*) †

During the period from March to the end of September, 1937, these locusts in all stages of development were reported in different parts of the provinces of Luanda, Benguela, Malanga, Bié, and Huila.

Argentine Republic: 'Fermented' Maize Ears and Control Measures §

The 'Dirección de Sanidad Vegetal' has informed the Ministry of Agriculture of the result of the research work completed by Mr. Léon Grodsinsky, agricultural engineer, of the Phytopathological Division on different samples of maize ears showing 'fermented' kernels, received last February from the province of Buenos Aires (Pergamino, Arrecifes, Lobos and San Pedro), and which were found to be attacked by *Diplodia zeae* (Schw.) Lév. Although this parasite has already been reported in the country (1935) it had not been subjected to any specialized study in this Republic.

The studies effected up-to-date have afforded a definite identification of the fungus, the typical lesions of the disease and its reproduction with pure cultures of the parasite. At the same time, by laboratory, tests none of the maize kernels were found to germinate.

The ears affected with disease are easily recognizable on harvesting by the 'fermented' aspect of the kernels. Occasionally a white, cotton-like mould is seen in the spaces between the rows of kernels and generally spreads from the base of the ears to the tip. In a more advanced stage of the disease, the entire

* Under this and the next heading the countries are arranged in French alphabetical order.

† Communication from Mr. JORGE DE BARROS RODRIGUES QUEIROZ, Director of the Laboratory of Plant Pathology and Agricultural Entomology, Luanda, transmitted to the Institute by Government General of the Colony.

§ Communication from the official correspondent of the Institute, Mr. JUAN B. MARCHIONATTO, Agricultural Engineer, Director of 'Sanidad Vegetal', Ministry of Agriculture, Buenos Aires, Argentine Republic.

ear is covered by the fungus; finally, and once the fungus has made its appearance, the kernels turn a greyish colour, and the ear takes on a charred aspect as if it had been exposed to the action of heat.

The kernels attacked lose their germinative power and their food value also changes. Sound kernel coming into contact with diseased kernel becomes infected and the fungus is found on the young seedlings.

The parasite attacks both the culm and the leaf sheath, producing in the first a disintegration of the tissues, which become weakened and break under the force of the wind; and in the second, violet-purple spots, easily recognizable from the outside.

From the research work carried out during the current year in maize storage centres in different localities of the provinces of Buenos Aires, Santa Fe and Córdoba, it is deduced that although the disease occurs with a certain frequency, it is not very extensive, affecting in the most serious cases, in Pergamino, 2 per cent. of the crop.

In English-speaking countries, the disease is known as 'dry-rot', and in the Argentine Republic the diseased ears are known as 'espigas mohosas' or 'tostadas', and in commerce the kernels are called 'fermented' seed.

For preventing the disease, and as no resistant varieties of maize are known, the following measures are advocated: (1) selection and destruction by fire of all 'fermented' ears, avoiding any contact with healthy specimens; and (2) disinfection of the kernels before sowing by the same 'dry' method adopted for the disinfection of wheat seed.

Eritrea: Locusts *

During the months of October and November, 1937, no locusts were reported in the Colony.

United State of America: Dutch Elm Disease Control in 1937 †

The Federal Forces of the Bureau of Entomology and Plant Quarantine made substantial progress in 1937 in the fight on the Dutch elm disease, *Ceratostomella ulmi* (Schwarz) Buisman. The number of diseased trees found in 1937 dropped 25 per cent. below last year's total in the territory where the infection is known to be seriously epiphytotic, an area extending 50 miles radially from New York City into Connecticut, New York State, and New Jersey. The disease has spread to no new territory in 1937 nor has it recurred in any of the six localities in Maryland, Virginia, and Ohio where 78 infected trees have been found in the past. Apparently these trees were discovered and removed

* Communication from Dr. LUIGI M. BOLOGNA, Acting Chief of the Agricultural Bureau of Eritrea, Asmara, transmitted to the Institute by the Government of the Colony.

† Communication from the official correspondent of the Institute, Mr. H. A. EDSON, Principal Pathologist in Charge, Division of Mycology and Disease Survey, Bureau of Plant Industry, United States Department of Agriculture, Washington.

in time to prevent them from becoming sources of new infections. Closer scouting through a wider zone in Indianapolis, Indiana, where the disease was first known to occur in 1934, resulted in the finding of 32 infected trees, all of which have been removed. The only previously undiscovered centers of infection brought to light were one diseased elm at Athens, Ohio, and five at Wileys Ford, West Virginia.

Southern Rhodesia: Locust Invasion, 1932-1937 *

Monthly Report No. 59. October, 1937.

Swarms of the Red Locust (*Nomadacris septemfasciata*, Serv.) have been reported from the following districts during the month, namely: - Umtali, Melsetter, Victoria, Belingwe, Makoni, Marandellas, Sebungwe, Bulawayo, Charter, Ndangs, Gwelo, and Hartley.

Many of these swarms have been described as large.

The reports refer mostly to the eastern and southern portions of the colony.

The number of reports received is rather less than during the same month last year, but the position appears to be very similar.

Egg-laying has not been reported and specimens received at Salisbury had not yet attained egg-laying condition.

No evidence of disease or parasitation has been recorded.

Some damage to crops and early grass is reported from the eastern districts.

LEGISLATIVE AND ADMINISTRATIVE MEASURES

French West Africa (Senegal). — By Decree of the Governor General of 29 September, 1937, the Decree No. 2652 A. E., of 17 September, 1937, of the Governor of Senegal, abrogating the Decrees of 17 July, 1934 and 4 September, 1935, and establishing certain measures with a view of protecting groundnuts from attacks of weevils [*Pachymerus acaciae*], is approved. (*Journal officiel de l'Afrique occidentale française*, Gorée, 9 octobre 1937, 33e année, nº 1743, p. 1043).

Germany. — Four Decrees, each dated 15 September, 1937, modify the list of custom-houses authorized to accept respectively consignments of fresh cherries and potatoes from abroad, consignments of plants other than grape-vines, as well as consignments of fresh fruits and living plants subject to compulsory inspection in respect of the San José scale [*Aspidiotus perniciosus*] and the apple maggot [*Rhagoletis pomonella*]. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. Oktober 1937, Bd. IX, Nr. 7, S. 144-146).

* Communication from the official correspondent of the Institute, Mr. Rupert W. Jack, F. E. S., Chief Entomologist, Department of Agriculture, Salisbury, Southern Rhodesia.

*** By Ordinance of 16 September, 1937, relative to the elimination of potato varieties not resistant to wart disease [*Synchytrium endobioticum*], it is established that from the year 1938, certain varieties may not be used for propagation. However, an exception shall be made in the case of plants intended for export. Only those farms where in previous years potatoes pertaining to the varieties comprised in the list annexed to the present Ordinance were certified, shall be able to obtain authorization in 1938, and for the last time in 1939. However, the surface area authorized for planting shall not exceed respectively 75 per cent. and 50 per cent. of that authorized in 1937. (*Ibid.*, S. 146-147).

*** According to the fourth Decree of 30 September, 1937, relative to preventing the introduction of the Colorado beetle [*Leptinotarsa decemlineata*], Switzerland is added to the list of countries considered contaminated by this pest and the regulations specified in the third Decree of 20 July, 1937 [see this *Bulletin*, 1937, No. 10, pp. 224-225] also apply to consignments from this country. (*Ibid.*, 1. November 1937, Nr. 8, S. 163-164).

*** By Decree of 8 October, 1937, relative to the control of wart disease of the potato [*Synchytrium endobioticum*] from 1 March, 1941 onwards, it is prohibited to cultivate varieties of potato other than those recognized as being resistant to the disease by the ' Biologische Reichsanstalt für Land- und Forstwirtschaft ', Berlin-Dahlem.

Until 28 February, 1941, and only on areas which have not yet been infected with wart disease, non-resistant potato varieties may be cultivated, varieties which will have been authorized entry.

From 1 July, 1940, only varieties certified as being resistant to wart disease may be sold for seed potatoes.

Potato fields and all stored potatoes will be subjected to inspection by the Plant Protection Service, which will verify the presence or absence of the disease.

The proprietors and holders of potato fields shall carefully control their fields. The presence of wart disease or any suspected symptom should be immediately reported to the police authorities who will communicate with the Plant Protection Service. In infected areas, all debris of potato plants, particularly foliage and tubers showing warty protuberances, should be destroyed.

When a field is found to be infected, planting of potatoes the following year is prohibited.

Potatoes harvested from infected areas should not be employed as seed potatoes. Potatoes may not be removed from infected farms without the authorization of the Plant Protection Service.

Potatoes from non-infected areas pertaining to infected farms, may not leave these farms unless on authorization of the Plant Protection Service.

These regulations do not apply to scientific and genetical research carried out with the authorization of the Minister of Agriculture.

All infringements will be punished by fines and imprisonment up to a period of two years.

The regulations of this Decree apply to the whole Reich and supersede all prescriptions relative to the control of wart disease and the trade of resistant varieties, decreed by various administrative bodies. (*Ibid.*, S. 168-170).

*** A Circular of 12 October, 1937, relative to the application of the preparation ' Delicia ' for the destruction of the corn weevil [*Calandra granaria*], supplements the regulations given on this subject in the Circular of 18 April, 1936 [see this *Bulletin*, 1936, No. 6, p. 124]. (*Ibid.*, S. 170-171).

*** A Decree of 15 October, 1937, stipulates that the import of non-living parts of conifers, authorized by the Decree of 3 June, 1930 [see this *Bulletin*, 1930, No. 10, p. 150], is limited to the neighbouring countries. The non-living parts of leaves, authorized by the Decree of 16 April 1937 [see this *Bulletin*, 1937, No. 7, p. 150], may also be introduced without restriction if originating in the adjoining countries. (*Ibid.*, S. 167-168).

*** By Decree of 20 October, 1937, the Minister of Agriculture has modified the Decree of 29 July, 1937 [see this *Bulletin*, 1937, No. 10, p. 225], and has granted facilities for the import and transit of horticultural products originating in France, Belgium, Luxemburg and Switzerland, countries considered to be contaminaed by the Colorado beetle [*L. decemlineata*].

Certain ornamental plants, living and with roots, with or without attached earth, may be imported throughout the year. The list of these plants includes the species and varieties enumerated in the list of plants allowed import from England into France [see this *Bulletin*, 1937, No. 7, pp. 154-155] and adds the following:— *Amaryllis, Azalea, Bambusa* (with the exception of hardy varieties), *Bignonia, Bouvardia, Carludovica, Costus, Crinum, Cycas, Cyperus, Euonymus japonicus, Gesneria, Manihot, Paeonia* (with the exception of hardy varieties), *Petrea, Philodendron* and *Rhododendron*. Consignments should be accompanied by a certificate issued by the Plant Protection Service of the country of origin. A form of this certificate is annexed to this Decree.

Tubers of *Gloxinia* and *Begonia* may also be introduced throughout the year.

The aerial and fresh parts of the plants cited in the above-mentioned list may be imported during the period of 1 April to 14 November.

Nursery plants may be introduced from 15 November to 31 March, on the condition that they are free from attached earth and that their roots had previously been washed.

Plants and parts of plants mentioned above may be introduced throughout the year if included in the hand luggage of travellers and if the introduction is not made for commercial purposes.

The transit of the aforesaid plants and parts of plants is authorized during the periods in which importation of the various categories is authorized.

The transit of fresh vegetables is authorized under the following conditions: (1) the products should be free from adhering soil; (2) they should be packed in such a manner that any Colorado beetles which may possibly be present, cannot escape; (3) consignments should be accompanied by a phytosanitary certificate in conformity with the form accepted; (4) inspection at the frontier should not have ascertained any irregularity; (5) transport should be carried out under the control of the customs authorities. (*Ibid.*, S. 164-167).

Argentine Republic. — By Decree No. 111.98 of 3 August, 1937 the port of Alvear (Corrientes) is authorized up to 31 December, 1937, to receive oranges and tangerines from Brazil en route for Buenos Aires. (*Boletín Oficial de la República Argentina*, Buenos Aires, 23 de octubre de 1937, año XLV, núm. 12.984, pág. 13139).

*** By Decree No. 112.630 of 24 August, 1937 cotton-growers of Chaco territory and the province of Santiago del Estero are no longer obliged to comply with the regulation of Article 17 of the Decree of 2 July, 1924, relative to the compulsory burning of the stubble following harvesting. for the control of the pink bollworm [*Platyedra gossypiella*]. (*Ibid.*).

*** The Decree No. 115.748 of 8 October, 1937 modifies the Articles 55 to 59 of Decree No. 83.732 of 3 June, 1936, regulating the Law No. 4084 of 10 July, 1902 [see this *Bulletin*, 1936, No. 12, p. 265].

Every consignment of potatoes introduced into the country, besides complying with the general conditions established in this Regulation, should be accompanied by the following certificates:—

Seed potatoes. — Certificates testifying to health conditions of origin and shipment should guarantee besides the requirements given in Article 8, that the crops where the tubers are obtained, are free from *Synchytrium endobioticum*, *Phthorimaea operculella*, *Leptinotarsa decemlineata*, and virus diseases, in the latter case, two per cent. of diseased tubers being permissible.

Potatoes for consumption. — Certificate of health for shipment.

Consignments of potatoes should also conform, *inter alia*, with the following conditions:—

The tubers should be free from lesions due to insects or other causes, internal modifications, of any origin, attacks by *Actinomyces scabies*, *Rhizoctonia solani*, etc., and free from any disease or serious parasites not found in the country (*Synch. endobioticum*, *Phthor. operculella*, etc.).

Five per cent. of tubers showing defects, lesions or common diseases is permissible in the case of seed potatoes, and ten per cent. of potatoes for direct consumption. Only one per cent. is allowed of unsound potatoes, and in the case of tubers affected by diseases or pests not existing in the country, no allowance whatsoever is made.

Consignments showing higher percentages of diseased tubers are tried or disinfected, according to the decision of the respective sanitary authorities, the expenses incurred being debited to the consignee. The consignments found to be affected by dangerous diseases or pests not existing in the country, shall be returned or destroyed, according to the dispositions of Article 5; any damage or loss caused shall be charged to the responsible persons.

The entry of ' certified ' seed potatoes is authorized only if originating from crops registered at the special Services for the certification of seed potatoes, which crops are subjected to established regulations and inspected periodically by the said Services under the control of the national or State Governments, or else by official experiment Stations, of the country of origin.

Potatoes shall only be allowed entry through the ports of Buenos Aires and Río Gallegos. (*Ibid.*, 23 de octubre de 1937, núm. 12.984, págs. 13141 y 13142).

*** Decree No. 116.302 of 11 October, 1937 establishes the prices and terms for the sale of barriers for the control of the South American locust [*Schistocerca paranensis*]. (*Ibid.*, 4 de noviembre de 1937, núm. 12.993, pág. 13635).

*** By Decree No. 116.897 of 20 October, 1937 the port of Paso de los Libres (Corrientes) is authorized for the introduction of plant products in general, with the exception of sugar cane, cotton seed, potatoes and grape vines.

Fresh fruits are only allowed entry in transit for Buenos Aires. (*Ibid.*, pág. 13636).

*** Decree No. 117.196 of 25 October, 1937 modifies the Decree No. 116.302 cited above. (*Ibid.*).

Belgium. — A Ministerial Decree of 12 October, 1937 modifies the Ministerial Decree of 14 May, 1937 [see this *Bulletin*, 1937, No. 7, p. 153] in respect of the fees charged for inspection and certification of consignments of plants intended for abroad. (*Moniteur Belge*, Bruxelles, 21 octobre 1937, 107e année, nº 294, p. 6405).

Brazil. — By ' portaria ' No. 4.986-A of 17 October, 1937, the zone of the Federal District comprising the circumscriptions of Campo Grande and Realengo have been declared infected by the sweet orange scab (*Elsinoe australis* [*Sphaceloma fawcetti* var. *viscosa*]).

The other circumscriptions of the Federal District as well as the communes of Iguassú, Vassouras and São Gonçalo of Rio de Janeiro State are declared suspected zones.

Attention is drawn to the regulation measures relative to the control of this disease and to the transit of plants and parts of plants, to be adopted in the said zones by the Phytopathological Service. (*Diário Oficial*, [Rio de Janeiro], 26 de octubre de 1937, ano LXXVI, n. 245, pag. 21522).

Chile. — By Decree No. 646 of 30 April, 1937, the phytosanitary ' Acuerdo ' signed at Guayaquil on 9 January, 1937, by the official delegations of Ecuador and Chile is approved [see this *Bulletin*, 1937, No. 11, pp. 249-250].

In the text of this Agreement, the last phrase of Article 1, paragraph (*a*) has been suppressed, *viz.* — ' During the remainder of the year, the oranges grown as far as Taltal may be imported '. (*Diario Oficial de la República de Chile*, Santiago, 23 de agosto de 1937, año LX, núm. 17.849, págs. 2581 y 2582).

*** The Decree No. 536 of 20 August, 1937 authorizes the import of avocados [*Persea gratissima*] from Peru, subject to the following conditions:—

The fruit should not be in an over-ripe state when landed and be guaranteed free from attacks by the fruit fly (*Anastrepha* spp).

The avocados should originate in a region exempt from anthracnose (*Physalospora perseae*), or else in a region where the cankers produced on the trees by this fungus have been almost entirely eradicated and where a systematic elimination is being continued. Moreover, the fruits should be free from any lesions caused by the said fungus.

The fruit should not contain caterpillars.

Consignments of the fruit should be accompanied by a certificate granted by the official authorities of ' Sanidad Vegetal ' of Peru, testifying that the aforesaid conditions have been observed.

The presence of the fruit fly or caterpillars or anthracnose lesions observed on the fruits on landing will be sufficient to cause refusal of the consignment in question. (*Ibid.*, 6 de septiembre de 1937, núm. 17,861, pág. 2706).

Ecuador. — The Law No. 149 of 3 August, 1937 gives the dispositions relative to the import, export and transport of animals, plants, fruits, and seeds. (*Registro Oficial*, Quito, 7 de agosto de 1937, año II, núm. 559, págs. 1535 y 1536).

*** The ' Acuerdo ' No. 275 of 9 August, 1937 regulates the dispositions of the aforesaid Law in respect of plants, animals and their derivatives and also with regard to the standardization of Ecuadorian fruits intended for sale on international markets. (*Ibid.*, 26 de agosto de 1937, año I, núm. 14, págs. 1695 a 1698).

France. — By Ministerial Decree of 30 October, 1937 hamsters [*Cricetus cricetus*] have been added to the list of animals considered harmful in the departments of Haut-Rhin, Bas-Rhin and Moselle. (*Journal officiel de la République française*, Paris, 14 novembre 1937, LXIX^e^ année, n^o^ 264, p. 12494).

French Indo-China. — A Decree of 20 October, 1937, establishing at the ' Direction ' of Economic Services, a general Inspection Service for Agriculture, Animal Husbandry and Forests states, *inter alia*, that the Inspector General of Agriculture, Animal Husbandry and Forests is also the director of the phytosanitary Service. (*Journal officiel de l'Indochine française*, Hanoi, 30 octobre 1937, XLIX^e^ année, n^o^ 88, p. 3209-3210).

*** Another Decree of the same date regarding the organization of the Institute of Agronomic and Forest Research specifies, *inter alia*, that this Institute is charged with the application of phytosanitary regulations. (*Ibid.*, p. 3210-3211).

Italy. — By Ministerial Decree of 4 September, 1937, the territories of the communes of San Giovanni Valdarno and Terranova Bracciolini, Province of Arezzo, have been declared infested with grape phylloxera. (*Gazzetta Ufficiale del Regno d'Italia*, Roma, 17 settembre 1937, anno 78°, n. 217, p. 3492).

*** By Ministerial Decree of 29 September, 1937, the Fano Royal Observatory for plant diseases is abolished from 1 October, 1937.

The circumscription of the Florence Royal Observatory for plant diseases shall henceforth also include provinces of Ancona, Macerata, Pesaro, and Ascoli Piceno. (*Ibid.*, 16 novembre 1937, n. 265, p. 4101)

*** By Ministerial Decree of 20 October, 1937, the wine-growing areas of Ancona Province are declared infested by grape phylloxera. (*Ibid.*, 6 novembre 1937, anno 78°, n. 257, p. 4020).

*** By Ministerial Decree of 28 October, 1937, the territories of the communes of Magliano de' Marsi, Scurcola Marsicana, and Ortucchio, Aquila Province, have been declared infested with grape phylloxera. (*Ibid.*, 10 novembre 1937, n. 260, p. 4050).

Morocco (French Zone). — By Decree of the Director of Economic Affairs, dated 27 October, 1937, the list of the countries invaded by the Colorado beetle [*Leptinotarsa decemlineata*] and enumerated in the Decrees of 3 September, 1936 and 5 April, 1937 [see this *Bulletin*, 1936, No. 11, pp. 246-247, and 1937, No. 8, p. 181], now includes the following countries:— the Netherlands and Switzerland. (Empire chérifien. Protectorat de la République française au Maroc. *Bulletin Officiel*, Rabat, 12 novembre 1937, XXVI[e] année, n° 1307, p. 1506).

Norway. — A Royal Resolution of 24 September, 1937 temporarily prohibits the import of living root plants, roots, rhizomes, tubers, bulbs, tomatoes and egg-plants from France, Belgium, Luxemburg, U. S. A., and Canada. (*Norsk Lovtidende*, Oslo, 28 september 1937, nr. 35, s. 1038).

New Zealand. — By special order made by the Waikohu County Council on 31 August, 1937 and published by the Minister of Agriculture on 13 September, 1937 barberry (*Berberis vulgaris*) has been declared to be a noxious weed in the said County. (*The New Zealand Gazette*, Wellington, September 16, 1937, Numb. 64, p. 2191).

Tunis. — By Decree of the Director of Economic Affairs, dated 15 September, 1937, grape vine shoots, cuttings, or root plants from the nurseries of France and Algiers may be imported into Tunis under the following conditions:—

(1) Nurserymen should be registered at the 'Direction' of Economic Affairs (Department of Agriculture), Tunis, before 15 June of each year, declaring their agreement to a botanical inspection of their nurseries by an agent of the Tunisian Administration designed for this purpose, and to all control measures which might be necessary in order to ensure safe delivery.

(2) Consignments should be accompanied by a phytopathological certificate issued by the Plant Protection Services and a certificate of origin issued by the mayor of the commune from which the shoots, cuttings or root plants are obtained.

(3) The cuttings and root plants should be packed in cases; cuttings from Algiers may be consigned in sacks or packing cloth.

(4) On their arrival, the cuttings and root plants shall be disinfected at the expense of the State, by officials of the Administration and phylloxera experts.

(5) No debris of the plant shall be included in the packing. Packing material will be burnt or disinfected on opening. The inner packing will be burnt.

Import will be allowed, under the same conditions as above, but only by special authorization of the Director of Economic Affairs and by means of the Obligatory General Syndicate of Wine-Growers or the Wine Office, of:—

(1) Shoots, cuttings and root plants of the grape-vine originating in countries other than those mentioned above.

(2) Grape hybrids, known as 'direct producers'.

Root plants transported through Tunis should be accompanied by a way-bill of the form supplied by the 'Direction' of Economic Affairs. This way-bill shall be issued to the consignee who shall return it by post, on the same day, to the 'Direction' of Economic Affairs, Tunis, under penalty of fines according to the regulation on phylloxera. (*Journal Officiel Tunisien*, Tunis, 1er octobre 1937, 55e année, nº 79, p. 1259).

*** A Decree of the Director of Economic Affairs, dated 22 September, 1937, specifies the wine-growing circumscriptions, the areas declared infested by grape phylloxera, as well as the cheikhats authorized to cultivate all vines which may be imported into Tunis in conformity with the Decree of 15 September, 1937.

The cultivation of imported grape-vine shoots and cuttings is authorized, with the exception of imported root plants, in all cheikhats where the presence of grape phylloxera has not been ascertained. Planting is also authorized, in these cheikhats, of root plants originating from nurseries recognized as being free from grape phylloxera, established outside the aforesaid cheikhats, on land distant at least 10 kilometres from any vineyard and not having been planted with grape-vine for at least 10 years. (*Ibid.*, p. 1259-1260).

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[Contains *inter alia* the following parts:—
II. — Malattie e parassiti delle piante in generale e dei cereali in ispecie (pp. 161–263, figg. 1–42, 1 tav.).
III. — Del trattamento coi veleni e sua teoria (pp. 267–330, figg. 1-13).
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Informe de la Comisión Investigadora del Oeste (Pablo Köler).
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NOTES

Official Correspondents. — Mr. Claudius FRAPPA, Director of the Laboratory of Entomology, Tananarive, and chief officer in charge of locust control in Madagascar, has been nominated official correspondent of the International Institute of Agriculture for all entomological questions regarding this Colony.

Prof. ALESSANDRO BRIZI, *Segretario generale dell'Istituto, Direttore responsabile.*

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